

AMENDMENTS TO THE CLAIMS

Please amend claims 1 and 8 as follows.

Please cancel claims 19-26 without prejudice.

1. (Currently amended) An apparatus, comprising:
a Micro-electromechanical System (MEMS) module including at least one MEMS device and a cap covering the at least one MEMS device;
at least one contact mounted to a bottom of the MEMS module; and
at least one via to pass vertically through ~~a portion of the MEMS module~~ the cap to electrically couple the at least one MEMS device to the contact.
2. (Original) The apparatus of claim 1 wherein the at least one MEMS device comprises a MEMS RF switch array including at least one switch.
3. (Original) The apparatus of claim 1 wherein the MEMS module includes an input terminal, an output terminal, and an actuation terminal each electrically coupled to the at least one MEMS device.
4. (Original) The apparatus of claim 3 wherein the input terminal is electrically coupled to a first via of the at least one via, the output terminal is electrically coupled to a second via

of the at least one via, and the actuation terminal is electrically coupled to a third via of the at least one via.

5. (Original) The apparatus of claim 4 wherein the first via is electrically coupled to the first contact, the second via is electrically coupled to a second contact mounted to the bottom of the MEMS module, and the third via is electrically coupled to a third contact mounted to the bottom of the MEMS module.

6. (Original) The apparatus of claim 1, further comprising a trace ring to couple the at least one MEMS device to a first via of the at least one via.

7. (Original) The apparatus of claim 6 wherein the trace ring surrounds at least a portion of the at least one MEMS device to allow a signal to transit the MEMS module using a second via of the at least one via without crossing the trace ring.

8. (Currently amended) The apparatus of claim 1, further comprising a seal ring to couple ~~a first section to a second section of the MEMS module~~ the cap to a section of the MEMS module, wherein the section of the MEMS module includes the at least one MEMS device.

9. (Original) The apparatus of claim 1, further comprising a printed circuit board (PCB) coupled to the contact.

10. (Original) A Micro-electromechanical System (MEMS) Radio Frequency (RF) switch module, comprising:

a MEMS die including an RF switch array;

a cap section coupled to the MEMS die, the cap section including at least one vertical via to pass through the cap section.

11. (Original) The MEMS RF switch module of claim 10 wherein the cap section is coupled to the MEMS die by a seal ring.

12. (Original) The MEMS RF switch module of claim 10 wherein the cap section comprises Silicon.

13. (Original) The MEMS RF switch module of claim 10 wherein the cap section comprises a ceramic material.

14. (Original) The MEMS RF switch module of claim 10 wherein the MEMS die comprises:

an input terminal electrically coupled to the RF switch array and to a first vertical via of the at least one vertical via;

an output terminal electrically coupled to the RF switch array and to a second vertical via of the at least one vertical via; and

an actuation terminal electrically coupled to the RF switch array and to a third vertical via of the at least one vertical via.

15. (Original) The MEMS RF switch module of claim 14 wherein the MEMS die comprises a second RF switch array electrically coupled to a second input terminal and to a second actuation terminal, the second RF switch array electrically coupled to the output terminal.
16. (Original) The MEMS RF switch module of claim 10, further comprising a trace ring to electrically couple a first vertical via of the at least one vertical via to the RF switch array.
17. (Original) The MEMS RF switch module of claim 16 wherein the trace ring surrounds at least a portion of the RF switch array to allow a signal to enter or exit the MEMS RF switch module by way of a second vertical via of the at least one vertical via without crossing the trace ring.
18. (Original) The MEMS RF switch module of claim 10, further comprising a printed circuit board (PCB) electrically coupled to the RF switch array by way of the at least one vertical via.

Claims 19-26 (Cancelled).